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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/039,961 | 12/31/2001 | Andrew F. Glew | 42390.P13736 | 8435 |

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John P. Ward, Esq.
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

| EXAMINER |
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SCHUBERT, KEVIN R

| ART UNIT | PAPER NUMBER |
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2137

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,961

Applicant(s)

GLEW ET AL.

Examiner

Kevin Schubert

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-39 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

A-1

DETAILED ACTION

Requirement for Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- 5 I. Claims 1-23 are drawn to a processor which has a private memory and one or more execution units to authenticate and execute an authenticated code module stored in the private memory, classified in class 713, subclass 189 (Electrical Computers and Digital Processing Systems: Data Processing Protection Using Cryptography).
- 10 II. Claims 24-39 are drawn to a processor which a separate front end unit which is used to fetch an instruction and one or more execution units to execute an instruction that results in retrieving a key and authenticating an authenticated code module, classified in class 713, subclass 192 (Electrical Computers and Digital Processing Systems: Data Processing Protection Using Cryptography: Having Separate Add-On Board). The examiner notes that the front end unit can also generate one or more ops for the
- 15 instruction (claim 25).

The inventions are distinct each from each other because:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are said to be distinct from each other if it can be shown that they are separately usable. In the instant case invention II has separate utility because it comprises a separate

20 front end unit which fetches an instruction and can perform additional processing features, such as generating one or more ops for the instruction. The examiner notes that the two inventions can also be shown to be separately usable in other ways which are not disclosed in this action for the sake of brevity. See MPEP 806.05(d).

25 Because the inventions are distinct for the reasons given and have acquired a separate classification in the art, restriction for examination purposes is proper.

Requirement for Election of Species

In addition to the restriction requirement, invention I includes twelve patentably distinct species.

The species differ based on three distinct characteristics: whether a key is retrieved from a chipset, a token, or a processor; whether the execution units in response to the launch instruction use a key for cryptographic authentication or mask one or more events from a group of events; and whether the execution units execute from an execution point specified by one or more operands of the launch instruction or one or more fields of the authenticate code module. If invention I is selected, one of the following species must also be selected:

a. retrieving a key from a chipset, using a key for cryptographic authentication in response to the launch instruction, and executing from an execution point specified by one or more operands of the launch instruction (claims 9,12-15, and 19);

b. retrieving a key from a chipset, using a key for cryptographic authentication in response to the launch instruction, and executing from an execution point specified by one or more fields of the authenticate code module (claims 9,12-15, and 20);

c. retrieving a key from a chipset, masking one or more events from a group of events in response to the launch instruction, and executing from an execution point specified by one or more operands of the launch instruction (claims 9,21, and 19);

d. retrieving a key from a chipset, masking one or more events from a group of events in response to the launch instruction, and executing from an execution point specified by one or more fields of the authenticate code module (claims 9,21, and 20);

e. retrieving a key from a token, using a key for cryptographic authentication in response to the launch instruction, and executing from an execution point specified by one or more operands of the launch instruction (claims 10,12-15, and 19);

f. retrieving a key from a token, using a key for cryptographic authentication in response to the launch instruction, and executing from an execution point specified by one or more fields of the authenticate code module (claims 10,12-15, and 20);

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g. retrieving a key from a token, masking one or more events from a group of events in response to the launch instruction, and executing from an execution point specified by one or more operands of the launch instruction (claims 10,21, and 19);

h. retrieving a key from a token, masking one or more events from a group of events in response to the launch instruction, and executing from an execution point specified by one or more fields of the authenticate code module (claims 10,21, and 20);

i. retrieving a key of the processor, using a key for cryptographic authentication in response to the launch instruction, and executing from an execution point specified by one or more operands of the launch instruction (claims 11,12-15, and 19);

j. retrieving a key of the processor, using a key for cryptographic authentication in response to the launch instruction, and executing from an execution point specified by one or more fields of the authenticate code module (claims 11,12-15, and 20);

k. retrieving a key from a processor, masking one or more events from a group of events in response to the launch instruction, and executing from an execution point specified by one or more operands of the launch instruction (claims 11,21, and 19);

l. retrieving a key from a processor, masking one or more events from a group of events in response to the launch instruction, and executing from an execution point specified by one or more fields of the authenticate code module (claims 11,21, and 20);

In addition to the restriction requirement, invention II includes two patentably distinct species. The species differ based on one distinct characteristic: whether the execution units execute from an execution point specified by one or more operands of the launch instruction or one or more fields of the authenticate code module. If invention II is selected, one of the following species must also be selected:

a. executing from an execution point specified by one or more operands of the launch instruction (claim 30);

b. executing from an execution point specified by one or more fields of the authenticate code module (claim 31).

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Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is
5 considered nonresponsive unless accompanied by an election.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either case, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35
10 U.S.C. 103(a) of the invention.

A complete response to this action includes an election of the invention to be examined and an election of species.

Conclusion

15 A shortened statutory period for response to this action is set to expire one month (not less than 30 days) from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally
20 be reached on M-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should
5 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KS

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EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER